of p bit cells at predetermined positions in a following information signal portion represent a unique information word, and in that the signal comprises sync signal portions which have bit cell patterns that do not occur in the sequence of successive information signal portions, while a unique information word is established by information signal portions of the at least one group of the second type combined with either an adjacent sync signal portion or an adjacent information signal portion, thereby allowing one information signal portion belonging to the at least one group of the second type to represent a plurality of information words among which the respective information word is distinguishable.

2.(amended) The record carrier as claimed in claim 1, characterized in that each number of successive bit cells having a same signal value ranges from a minimum of d+1 to a maximum of k+1, and at any arbitrary point in the signal the running value of the difference between the number of bit cells having the first signal value and the bit cells having the second signal value in a signal portion preceding this point is kept low.

3.   The record carrier as claimed in claim 2, characterized in that n is equal to 16, d is equal to 2 and k is equal to 10.

Cancel claims 4 and 5.

6.(amended) The record carrier as claimed in claim 2, characterized in that the information signal portions from the at least one group of the first type end in s bit cells having a same logical value, and in that the information signal portions from the at least one group of the second type end in t bit cells having a same logical value, wherein s and t can assume different values and wherein s and t are different in value.

7. (amended) The record carrier as claimed in claim 2, wherein the track information patterns comprise first and second parts alternating in the direction of the track, the first parts presenting detectable first properties and the second parts presenting second properties distinguishable from the first properties, and wherein the parts having the first properties represent the first signal value and the parts having the second properties represent the second signal value.

Cancel claim 8.

9. (amended) The record carrier as claimed in claim 1, characterized in that the information signal portions from the at least one group of the first type end in s bit cells having a same value, and in that the information signal portions from the at least one group of the second type end in t bit cells having a same value, wherein s and t can assume different values and wherein s and t are different in value.

10. (amended) The record carrier as claimed in claim 1, wherein the track information patterns comprise first and second parts alternating in the direction of the track, the first parts presenting detectable first properties and the second parts presenting second properties distinguishable from the first properties, and wherein the parts having the first properties represent the first signal value and the parts having the second properties represent the second signal value.

11. The record carrier as claimed in claim 1, characterized in that p is equal to 2.

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12. (amended) The record carrier as claimed in claim 1, characterized in that the information signal portions from the at least one group of the first type end in s bit cells having a same logical value, and in that the information signal portions from the at least one group of the second type end in t bit cells having a same logical value, wherein s and t can assume different values and wherein s and t are different in value.

13. (amended) A record carrier having a signal recorded in a track, the signal comprising a sequence of successive information signal portions, each signal portion representing an information word wherein each of the information signal portions comprises n bit cells having a first or second logical value and wherein a plurality of track information patterns represent the signal portions, characterized in that the information signal portions are spread over at least one group of a first type and at least one group of a second type, while each information signal portion belonging to a group of the first type uniquely represents an information word and each information signal portion belonging to a group of the second type in combination with the logical values of p bit cells at predetermined positions in a following information signal portion represent a unique information word, thereby allowing one information signal portion belonging to the at least one group of the second type to represent a plurality of information words among which the respective information word is distinguishable, and in that the information signal portions from the at least one group of the first type end in s bit cells having a same logical value, and in that the information signal portions from the at least one group of the second type end in t bit cells having a same logical value, wherein s and t can assume different values and wherein s and t are different in value, and in that t is greater than or equal to 2 and smaller than or equal to 5.

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14.(amended) The record carrier as claimed in claim 13, wherein the track information patterns comprise first and second parts alternating in the direction of the track, the first parts presenting detectable first properties and the second parts presenting second properties distinguishable from the first properties, and wherein the parts having the first properties represent the first signal value and the parts having the second properties represent the second signal value.

15.(amended) The record carrier as claimed in claim 1, wherein the track information patterns comprise first and second parts alternating in the direction of the track, the first parts presenting detectable first properties and the second parts presenting second properties distinguishable from the first properties, and wherein the parts having the first properties represent the first signal value and the parts having the second properties represent the second signal value.

16. The record carrier as claimed in claim 15, wherein said properties are optically detectable.

Please add the following new claims:

17. The carrier of claim 13, in which the value of s is one of: 0, 1, and 6-9.

18. The carrier of claim 13, in which the presence or absence of changes of the signal value between a first and a second signal value represents the first or second logical value, and each number of successive bit cells having a same signal value ranges from a minimum of d+1 to a maximum of k+1.

19. The carrier of claim 18, in which n is equal to 16, d is equal to 2 and k is equal to 10.

20. The carrier of claim 13, in which the at least one group of the first type substantially comprises only information signal portions selected from:

0000000001000001, 0000000001000010, 0000000001001001,
0000000010000001, 0000000010000010, 0000000010001001,
0000000010010001, 0000000010010010, 0000000100000001,
0000000100000010, 0000000100001001, 0000000100010001,
0000000100010010, 0000000100100001, 0000000100100010,
0000001000000001, 0000001000000010, 0000001000001001,
0000001000010001, 0000001000010010, 0000001000100001,
0000001000100010, 0000001001000000, 0000001001000001,
0000001001000010, 0000001001001001, 0000010000000001,
0000010000000010, 0000010000000100, 0000010000001001,
0000010000010001, 0000010000010010, 0000010000100001,
0000010000100010, 0000010001000000, 0000010001000001,
0000010001000010, 0000010001001001, 0000010010000000,
0000010010000001, 0000010010000010, 0000010010001001,
0000010010010001, 0000010010010010, 0000100000000010,
0000100000001001, 0000100000010001, 0000100000010010,
0000100000100001, 0000100000100010, 0000100001000000,
0000100001000001, 0000100001000010, 0000100001001001,
0000100010000000, 0000100010000001, 0000100010000010,
0000100010001001, 0000100010010001, 0000100010010010,
0000100100000000, 0000100100000001, 0000100100000010,
0000100100001001, 0000100100010001, 0000100100010010,
0000100100100001, 0000100100100010, 0001000000001001,
0001000000010001, 0001000000010010, 0001000000100001,
0001000000100010, 0001000001000000, 0001000001000001,
0001000001000010, 0001000001001001, 0001000010000000,
0001000010000001, 0001000010000010, 0001000010001001,

0001000010010001, 0001000010010010, 0001000100000000,
0001000100000001, 0001000100000010, 0001000100001001,
0001000100010001, 0001000100010010, 0001000100100001,
0001000100100010, 0001001000000000, 0001001000000001,
0001001000000010, 0001001000001001, 0001001000010001,
0001001000010010, 0001001000100001, 0001001000100010,
0001001001000000, 0001001001000001, 0001001001000010,
0001001001000100, 0001001001001001, 0010000000001001,
0010000000010001, 0010000000010010, 0010000000100001,
0010000000100010, 0010000001000000, 0010000001000001,
0010000001000010, 0010000001001001, 0010000010000000,
0010000010000001, 0010000010000010, 0010000010001001,
0010000010010001, 0010000010010010, 0010000100000000,
0010000100000001, 0010000100000010, 0010000100001001,
0010000100010001, 0010000100010010, 0010000100100001,
0010000100100010, 0010001000000000, 0010001000000001,
0010001000000010, 0010001000001001, 0010001000010001,
0010001000010010, 0010001000100001, 0010001000100010,
0010001001000000, 0010001001000001, 0010001001000010,
0010001001001001, 0010010000000001, 0010010000000010,
0010010000001001, 0010010000010001, 0010010000010010,
0010010000100001, 0010010000100010, 0010010001000000,
0010010001000001, 0010010001000010, 0010010001001001,
0010010010000000, 0010010010000001, 0010010010000010,
0010010010001001, 0010010010010001, 0010010010010010,
0100000000010001, 0100000000010010, 0100000000100001,
0100000000100010, 0100000001000000, 0100000001000001,
0100000001000010, 0100000001001001, 0100000010000000,
0100000010000001, 0100000010000010, 0100000010001001,
0100000010010001, 0100000010010010, 0100000100000000,
0100000100000001, 0100000100000010, 0100000100001001,
0100000100010001, 0100000100010010, 0100000100100001,
0100000100100010, 0100001000000000, 0100001000000001,

0100001000000010, 0100001000001001, 0100001000010001,
0100001000010010, 0100001000100001, 0100001000100010,
0100001001000000, 0100001001000001, 0100001001000010,
0100001001001001, 0100010000000001, 0100010000000010,
0100010000001001, 0100010000010001, 0100010000010010,
0100010000100001, 0100010000100010, 0100010001000000,
0100010001000001, 0100010001000010, 0100010001001001,
0100010010000000, 0100010010000001, 0100010010000010,
0100010010001001, 0100010010010001, 0100010010010010,
0100100000000010, 0100100000001001, 0100100000010001,
0100100000010010, 0100100000100000, 0100100000100001,
0100100000100010, 0100100001000001, 0100100001000010,
0100100001001001, 0100100010000001, 0100100010000010,
0100100010001001, 0100100010010001, 0100100010010010,
0100100100000000, 0100100100000001, 0100100100000010,
0100100100001001, 0100100100010001, 0100100100010010,
0100100100100001, 0100100100100010, 1000000000010001,
1000000000010010, 1000000000100001, 1000000000100010,
1000000001000000, 1000000001000001, 1000000001000010,
1000000001001001, 1000000010000000, 1000000010000001,
1000000010000010, 1000000010001001, 1000000010010001,
1000000010010010, 1000000100000000, 1000000100000001,
1000000100000010, 1000000100001001, 1000000100010001,
1000000100010010, 1000000100100001, 1000000100100010,
1000001000000000, 1000001000000001, 1000001000000010,
1000001000001001, 1000001000010001, 1000001000010010,
1000001000100001, 1000001000100010, 1000001001000000,
1000001001000001, 1000001001000010, 1000001001001001,
1000010000000001, 1000010000000010, 1000010000001001,
1000010000010001, 1000010000010010, 1000010000100001,
1000010000100010, 1000010001000000, 1000010001000001,
1000010001000010, 1000010001001001, 1000010010000000,
1000010010000001, 1000010010000010, 1000010010001001,

1000010010010001, 1000010010010010, 1000100000000010,
1000100000001001, 1000100000010001, 1000100000010010,
1000100000100001, 1000100000100010, 1000100001000000,
1000100001000001, 1000100001000010, 1000100001001001,
1000100010000000, 1000100010000001, 1000100010000010,
1000100010001001, 1000100010010001, 1000100010010010,
1000100100000000, 1000100100000001, 1000100100000010,
1000100100001001, 1000100100010001, 1000100100010010,
1000100100100001, 1000100100100010, 1001000000001001,
1001000000010001, 1001000000010010, 1001000000100001,
1001000000100010, 1001000001000000, 1001000001000001,
1001000001000010, 1001000001001001, 1001000010000000,
1001000010000001, 1001000010000010, 1001000010001001,
1001000010010001, 1001000010010010, 1001000100000000,
1001000100000001, 1001000100000010, 1001000100001001,
1001000100010001, 1001000100010010, 1001000100100001,
1001000100100010, 1001001000000000, 1001001000000001,
1001001000000010, 1001001000001001, 1001001000010001,
1001001000010010, 1001001000100001, 1001001000100010,
1001001001000000, 1001001001000001, 1001001001000010,
1001001001001001,
where "0" represents a first logical value and where "1"
represents a second logical value.

21. The carrier of claim 20, in which the at least one group of
the second type substantially comprises only information signal
portions selected from:
0000000001000100, 0000000001001000, 0000000010000100,
0000000010001000, 0000000010010000, 0000000100000100,
0000000100001000, 0000000100010000, 0000000100100000,
0000000100100100, 0000001000000100, 0000001000001000,
0000001000010000, 0000001000100000, 0000001000100100,
0000001001000100, 0000001001001000, 0000010000000100,

00b0010000001000, 0000010000010000, 0000010000100000,
0000010000100100, 0000010001000100, 0000010001001000,
0000010010000100, 0000010010001000, 0000010010010000,
0000100000000100, 0000100000001000, 0000100000010000,
0000100000100000, 0000100000100100, 0000100001000100,
0000100001001000, 0000100010000100, 0000100010001000,
0000100010010000, 0000100100000100, 0000100100001000,
0000100100010000, 0000100100100000, 0000100100100100,
0001000000000100, 0001000000001000, 0001000000010000,
0001000000100000, 0001000000100100, 0001000001000100,
0001000001001000, 0001000010000100, 0001000010001000,
0001000010010000, 0001000100000100, 0001000100001000,
0001000100010000, 0001000100100000, 0001000100100100,
0001001000000100, 0001001000001000, 0001001000010000,
0001001000100000, 0001001000100100, 0001001001000100,
0001001001001000, 0010000000001000, 0010000000010000,
0010000000100000, 0010000000100100, 0010000001000100,
0010000001001000, 0010000010000100, 0010000010001000,
0010000010010000, 0010000100000100, 0010000100001000,
0010000100010000, 0010000100100000, 0010000100100100,
0010001000000100, 0010001000001000, 0010001000010000,
0010001000100000, 0010001000100100, 0010001001000100,
0010001001001000, 0010010000000100, 0010010000001000,
0010010000010000, 0010010000100000, 0010010000100100,
0010010001000100, 0010010001001000, 0010010010000100,
0010010010001000, 0010010010010000, 0100000000010000,
0100000000100000, 0100000000100100, 0100000001000100,
0100000001001000, 0100000010000100, 0100000010001000,
0100000010010000, 0100000100000100, 0100000100001000,
0100000100010000, 0100000100100000, 0100000100100100,
0100001000000100, 0100001000001000, 0100001000010000,
0100001000100000, 0100001000100100, 0100001001000100,
0100001001001000, 0100010000000100, 0100010000001000,

01000100000010000, 0100010000100000, 0100010000100100,
0100010001000100, 0100010001001000, 0100010010000100,
0100010010001000, 0100010010010000, 0100100000000100,
0100100000001000, 0100100000010000, 0100100000100000,
0100100000100100, 0100100001000100, 0100100001001000,
0100100010000100, 0100100010001000, 0100100010010000,
0100100100000100, 0100100100001000, 0100100100010000,
0100100100100000, 0100100100100100, 1000000000100000,
1000000000100100, 1000000001000100, 1000000001001000,
1000000010000100, 1000000010001000, 1000000010010000,
1000000100000100, 1000000100001000, 1000000100010000,
1000000100100000, 1000000100100100, 1000001000000100,
1000001000001000, 1000001000010000, 1000001000100000,
1000001000100100, 1000001001000100, 1000001001001000,
1000010000000100, 1000010000001000, 1000010000010000,
1000010000100000, 1000010000100100, 1000010001000100,
1000010001001000, 1000010010000100, 1000010010001000,
1000010010010000, 1000100000000100, 1000100000001000,
1000100000010000, 1000100000100000, 1000100000100100,
1000100001000100, 1000100001001000, 1000100010000100,
1000100010001000, 1000100010010000, 1000100100000100,
1000100100001000, 1000100100010000, 1000100100100000,
1000100100100100, 1001000000000100, 1001000000001000,
1001000000010000, 1001000000100000, 1001000000100100,
1001000001000100, 1001000001001000, 1001000010000100,
1001000010001000, 1001000010010000, 1001000100000100,
1001000100001000, 1001000100010000, 1001000100100000,
1001000100100100, 1001001000000100, 1001001000001000,
1001001000010000, 1001001000100000, 1001001000100100,
1001001001000100, 1001001001001000,

where "0" represents a first logical value and where "1"
represents a second logical value.

22. A method of converting a series of m-bit information words to a modulated signal, with m being an integer, in which method an n-bit code word is delivered for each received information word, with n being an integer exceeding m, and the delivered code words are converted to the modulated signal, and in which the series of information words is converted to a series of code words according to rules of conversion so that the corresponding modulated signal satisfies a predetermined criterion, in which the code words are divided into at least one group of code words of a first type and at least one group of code words of a second type, where the delivery of each of the code words belonging to a group of the first type establishes a first type of coding state determined only by the group to which that code word belongs, and the delivery of each of the code words belonging to a group of the second type establishes a second type of coding state determined not only by the group to which that code word belongs but also by information content in the information word itself for which that code word is delivered, each coding state corresponding to a different set of code words into which information words are converted and when one of the code words is assigned to a received information word, that code word is selected from the set of code words that corresponds to the coding state of the first type or the second type established when a preceding code word was delivered, where the sets of code words corresponding to respective coding states of the second type do not contain any code words in common, in which at least one of the sets of code words for each of at least a number of information words comprise at least a pair of code words, with low-frequency components in the modulated signal being repressed when the information words are converted by selection of code words from the pairs of code words.

23. A method of converting a series of m-bit information words to a modulated signal, with m being an integer, in which method an n-bit code word is delivered for each received information word, with n being an integer exceeding m, and the delivered code words are converted to the modulated signal, and in which the series of information words is converted to a series of code words according to rules of conversion so that the corresponding modulated signal satisfies a predetermined criterion, in which the code words are divided into at least one group of code words of a first type and at least one group of code words of a second type, where the delivery of each of the code words belonging to a group of the first type establishes a first type of coding state determined only by the group to which that code word belongs, and the delivery of each of the code words belonging to a group of the second type establishes a second type of coding state determined not only by the group to which that code word belongs but also by information content in the information word itself for which that code word is delivered, each coding state corresponding to a different set of code words into which information words are converted and when one of the code words is assigned to a received information word, that code word is selected from the set of code words that corresponds to the coding state of the first type or the second type established when a preceding code word was delivered, where code words contained in different sets corresponding with respective coding states of the second type do not contain any code words in common with other sets, in which code words contained in different sets associated with the coding states of the second type are mutually distinguishable from other code words on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words, where p is an integer smaller than n, and in which low frequency components of the modulated signal are repressed.

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24. The method of claim 22, in which a running digital sum value is established as a measure for current DC contents, which value is determined over a preceding portion of the modulated signal and denotes for this portion the current value of a difference between the number of bit cells having a first signal value and the number of bit cells having a second signal value, the pairs of code words comprising two code words have opposite effects on the digital sum value, and the code words are selected from the pairs in response to certain digital sum values so that the digital sum value is kept low.

25. The method of claim 22, in which the modulated signal has bit cells of a first signal value and bit cells of a second signal value, and the series of information words are converted to a series of code words which establish a bit string having bits of a first logical value and bits of a second logical value, in which a number of successive bits having the first logical value and situated among bits having the second logical value is at least d and at most k, and the bit string is converted to the modulated signal, in which transitions from bit cells having the first signal value to bit cells having the second signal value or vice versa correspond to the bits having the second logical value in the bit string.

26. The method of claim 22, in which the code words are made up of bits having first and second logical values, and code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words, where p is an integer smaller than n

27. The method of claim 26, in which sync words are inserted into the series of code words, the sync words showing bit patterns that cannot occur in a bit string formed by the code words and having different bit patterns, the sync word being used depends on the coding state prior to its insertion, and it establishes a predetermined coding state for the conversion of the next information word to be converted after its insertion, and the sync words being mutually distinguishable on the basis of the logical values of bits at predetermined bit positions in a manner corresponding to the manner in which the code word sets corresponding to coding states of the second type are mutually distinguishable from each other.

28. The method of claim 26, in which p is equal to 2.

29. The method of claim 22, in which d is equal to 2, k is equal to 10 and the ratio of n to m is 2:1.

30. The method of claim 29, in which m is equal to 8, and n is equal to 16.

31. The method of claim 28, in which the code words are made up of bits having a first logical value and bits having a second logical value, a first group of the first type of code words is formed by code words ending in a bits having the first logical value, where a is equal to 0 or 1, a second group of the first type of code words is formed by code words ending in b successive bits having the first logical value, where b is an integer greater than or equal to 6 and smaller than or equal to 9, a group of the second type is formed by code words ending in c successive bits having the first logical value, where c is an integer greater than or equal to 2 and smaller than or equal to 5, and the coding state related sets of code words from which the

code words assigned to the information words are selected are formed by code words beginning with a number of bits of the first logical value, which number of bits depends on the coding state related to the set, so that the number of successive bits having the first logical value in a bit string formed by two successive code words is at least equal to d and at most equal to k.

32. A method for manufacturing a record carrier in which a modulated signal is generated by the method of claim 22 and the record carrier is then provided with an information pattern representing this signal.

33. An encoding device, comprising an m-to-n bit converter for converting m-bit information words to n-bit code words, means for converting the n-bit code words to a modulated signal, and state establishing means for establishing a coding state on the delivery of a code word by the converter, the state establishing means being arranged for establishing a first type of coding state for each delivered code word belonging to a group of a first type, which state is determined only by the group to which the delivered code word belongs, and for establishing a second type of coding state for each of the delivered code words belonging to a group of the second type, which state is determined not only by the group to which the delivered code word belongs but also by information content in the information word converted into the delivered code word, in which the m-to-n bit converter comprises means for selecting a code word corresponding to an information word from a set of code words corresponding respectively to the established coding state of the first type or the second type, sets of code words corresponding to respective coding states of the second type containing no code words in common with other sets of code words corresponding to respective coding states of the second type, in which the code words are

made up of bits having first and second logical values and code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words, where p is an integer smaller than n, and in which low frequency components of the modulated signal are repressed.

34. An encoding device, comprising an m-to-n bit converter for converting m-bit information words to n-bit code words, means for converting the n-bit code words to a modulated signal, and state establishing means for establishing a coding state on the delivery of a code word by the converter, the state establishing means being arranged for establishing a first type of coding state for each delivered code word belonging to a group of a first type, which state is determined by the group from which the delivered code word belongs, and for establishing a second type of coding state for each of the delivered code words belonging to a group of the second type, which state is determined by the information word which is to be converted to the delivered code word, in which the m-to-n bit converter comprises means for selecting a code word corresponding to an information word from a set of code words that depends on the coding state of the first type or the second type established, sets of code words corresponding respectively to coding states of the second type contain no code words in common with other sets of code words corresponding respectively to coding states of the second type, the modulated signal having bit cells and presenting substantially no frequency components in a low-frequency area in the frequency spectrum, in which each minimum number of successive bit cells having the same signal value is d+1 and each maximum number k+1, the converter further comprises means for generating a pair of code words for each of at least a number of

information words, and the device further comprises selecting means for selecting, for the code word delivery, either of the code words from the pairs in accordance with a predetermined criterion related to the low-frequency contents of the modulated signal.

35. The device of claim 34, further comprising means for determining a running digital sum value, which value denotes for a preceding part of the modulated signal the running value of a difference between the number of bit cells having a first signal value and the number of bit cells having a second signal value, in which the pairs of code words comprising each at least two code words have opposite effects on the digital sum value, and the selecting means comprises means for selecting, according to a criterion depending on the digital sum value, those code words from the sets for which the digital sum value according to this criterion continues to be kept low.

36. The device of claim 34, in which the device is arranged for converting the information words to a series of code words which establish a bit string of bits having a first logical value and bits having a second logical value, the minimum number of successive bits having the first logical value located between bits having the second logical value being d and the maximum number being k, and the device further comprises a modulo-2 integrator for converting the bit string to the modulated signal.

37. The device of claim 34, in which the code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words, where p is an integer smaller than n

38. The device of claim 37, further comprising means for inserting sync words into a bit string formed by the code words, the sync words displaying bit patterns that cannot occur in the bit string formed by the code words, means for selecting sync words to be inserted which have different bit patterns depending on the determined coding state, the sync words being mutually distinguishable on the basis of the logical values of bits at predetermined non-consecutive bit positions in a manner that corresponds to a manner in which the code words in the code word sets corresponding respectively to the coding states of the second type, can be mutually distinguished.

39. The device of claim 38, further comprising means for effecting a predetermined coding state once a sync word has been inserted.

40. The device of claim 37, in which p is equal to 2.

41. The device of claim 34, in which d is equal to 2, k is equal to 10, and the ratio of n to m is 2:1.

42. The device of claim 41, in which m is equal to 8, and n is equal to 16.

43. The device of claim 41, in which the code words are made up of bits having a first logical value and bits having a second logical value, a first group of the first type of code words is formed by code words ending in a bits having the first logical value, where a is equal to 0 or 1, a second group of the first type of code words is formed by code words ending in b successive bits having the first logical value, where b is an integer greater than or equal to 6 and smaller than or equal to 9, a group of the second type is formed by code words ending in c

successive bits having the first logical value, where c is an integer greater than or equal to 2 and smaller than or equal to 5, and the coding state related sets of code words from which the code words assigned to the information words are selected are formed by code words beginning with a number of bits of the first logical value, which number of bits depends on the coding state related to the set, so that the number of successive bits having the first logical value in a bit string formed by two successive code words is at least equal to d and at most equal to k.

44. A device for recording information, which device comprises a coding device of claim 34 for converting a series of information words representing the information to a modulated signal, and means for recording on a record carrier an information pattern corresponding to the signal.

45. A modulated signal representing a series of information words for subsequent demodulation and decoding to reproduce the represented series of information words, the coded signal comprising a sequence of q successive information signal portions which represent q information words, where q is an integer, in which signal each of the information signal portions represents one of the information words and comprises n bit cells, each the bit cell having a first or second logical value, each information signal portion belonging to one of a plurality of predetermined groups of information signal portions, each information signal portion belonging to a first one of the groups of information signal portions uniquely establishing an information word irrespective of information signal portions adjacent to the each information signal portion belonging to the first group, and each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the logical value of p

predetermined non-consecutive bit cells in an information signal portion adjacent to the each information signal portion belonging to the second group; where p is an integer smaller than n, and in which low frequency components of the modulated signal are repressed.

46. The signal of claim 45, in which the presence or absence of changes of the signal value between a first and a second signal value represents the first or second logical value, each number of successive bit cells having the same signal value is minimum d+1 and maximum k+1, and at any arbitrary point in the signal, the running value of the difference between the number of bit cells having the first signal value and the number of bit cells having the second signal value in a signal portion preceding that point is kept low.

47. The signal of claim 46, in which n is equal to 16, d is equal to 2, and k is equal to 10.

48. A modulated signal representing a series of information words for subsequent demodulation and decoding to reproduce the represented series of information words, the coded signal comprising:

a sequence of q successive information signal portions which represent q information words, where q is an integer, and

sync signal portions which have bit cell patterns that do not occur in the sequence of successive information signal portions;

and in which signal:

each of the information signal portions represents one of the information words and comprises n bit cells,

each the bit cell having a first or second signal property,

each information signal portion belonging to one of a plurality of predetermined groups of information signal portions,

each information signal portion belonging to a first one of the groups of information signal portions uniquely establishing an information word irrespective of information signal portions adjacent to the each information signal portion belonging to the first group,

each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the value of at least one bit cell in an information signal portion adjacent to the each information signal portion belonging to the second group, and

a unique information word is established by each of the information signal portions of the second group combined with either an adjacent sync signal portion or an adjacent information signal portion.

49. The signal of claim 45, in which the presence or absence of changes of the signal value between a first and a second signal value represents the first or second logical value.

50. The signal of claim 49, in which p is equal to 2.

51. The signal of claim 45, in which the information signal portions from the first group end in s bit cells having a same logical value, and the information signal portions from the second group end in t bit cells having the same logical value, where s can assume a number of different values, t can assume a number of different values, and s and t are different.

52. The signal of claim 51, in which t is greater than or equal to 2, and smaller than or equal to 5.

53. A record carrier on which the signal of claim 45 is stored in a track in which information patterns represent the signal portions, which information patterns comprise first and second parts alternating in the direction of the track, the first parts present detectable first properties and the second parts present second properties distinguishable from the first properties, and the presence or absence of changes between the parts having the first properties and the parts having the second properties represents the first or second logical value.

54. A decoding device for converting a modulated signal to a series of m-bit information words, the device comprising:

demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on the logical values of bits in the bit string which are located at p predetermined non-consecutive positions relative to the code word, where p is an integer smaller than n, and in which the converting means convert a code word selected from at least a pair of code words into an information word for each of at least a number of information words with low-frequency components in the signal being repressed by the selected code word.

55. The device of claim 54, in which n is equal to 16, m is equal to 8, and p is equal to 2.

56. The device of claim 55, in which the p predetermined bit positions are the first and thirteenth bit position past the end of the code word.

57. A decoding device for converting a coded signal modulated and stored on a record carrier to a series of m-bit information words, the coded signal representing a series of information words for subsequent reading, demodulation and decoding to reproduce the represented series of information words, the coded signal comprising:

a sequence of q successive information signal portions which represent q information words, where q is an integer, in which signal each of the information signal portions represents one of the information words and comprises n bit cells, each the bit cell having a first or second signal property,

each information signal portion belonging to one of a plurality of predetermined groups of information signal portions,

each information signal portion belonging to a first one of the groups of information signal portions uniquely establishing an information word irrespective of information signal portions adjacent to the each information signal portion belonging to the first group, and

each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the value of at least one bit cell in an information signal portion adjacent to the each information signal portion belonging to the second group,

the decoding device comprising:

means for converting the signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions,

converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on the logical values of bits in the bit string which are located at p predetermined positions relative to the code word and detection means for detecting sync words having bit patterns that cannot be formed by the successive code words in the series, or by a part of the sync word in combination with an adjacent code word.

58. The device of claim 57, in which the detection means detect 26-bit sync words corresponding to a bit pattern of "10010000000001000000000001" or to a bit pattern of "00010000000001000000000001", where "0" represents a first logical value and where "1" represents a second logical value.

59. A reading device for reading a record carrier on which information is recorded in an information pattern, the device comprising:

means for converting the information pattern to a corresponding modulated signal, and

demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on the logical values of bits in the bit string which are located at p predetermined non-consecutive positions relative to the code word, where p is an

integer smaller than n, and in which the converting means convert a code word selected from at least a pair of code words into an information word for each of at least a number of information words with low-frequency components in the signal being repressed by the selected code word.

60. The method of Claim 22, in which the p predetermined bit positions are the first and thirteenth bit position.

61. The method of Claim 28 in which the p predetermined bit positions are the first and thirteenth bit position.

62. The method of Claim 22, in which the at least a number of information words constitutes a lexicographically consecutive range smaller than the range of information words.

63. The method of Claim 62, in which the lexicographically consecutive range is equal for all sets

64. The method of Claim 62, in which the lexicographically consecutive range ranges from information word 0 to information word 87.

65. The device of Claim 33, in which the p predetermined bit positions are the first and thirteenth bit position.

66. The device of Claim 40, in which the p predetermined bit positions are the first and thirteenth bit position.

67. The device of Claim 33, in which the at least a number of information words constitutes a lexicographically consecutive range smaller than the range of information words.

68. The method of Claim 67, in which the lexicographically consecutive range is equal for all sets

69. The device of Claim 67, in which the lexicographically consecutive range ranges from information word 0 to information word 87.

70. The carrier of Claim 41, in which the p predetermined bit positions are the first and thirteenth bit position.

71. The carrier of Claim 41, in which the at least a number of information words constitutes a lexicographically consecutive range smaller than the range of information words.

72. The carrier of Claim 71, in which the lexicographically consecutive range ranges from information word 0 to information word 87.

73. The signal of Claim 46, in which the p predetermined bit positions are the first and thirteenth bit position.

74. The signal of Claim 51, in which the p predetermined bit positions are the first and thirteenth bit position.

75. The signal of Claim 46, in which the at least a number of information words constitutes a lexicographically consecutive range smaller than the range of information words.

76. The signal of Claim 75, in which the lexicographically consecutive range ranges from information word 0 to information word 87.

77. The device of Claim 54, in which the at least a number of information words constitutes a lexicographically consecutive range smaller than the range of information words.

78. The device of Claim 77, in which the lexicographically consecutive range ranges from information word 0 to information word 87.

79. The carrier of claim 2 in which the successive bit cells have the same signal value ranges from a minimum of $d+1$ to a maximum of $k+1$ both within information signal portions and across information signal portion boundaries.

80. The carrier of claim 18 in which the successive bit cells have the same signal value ranges from a minimum of $d+1$ to a maximum of $k+1$ both within information signal portions and across information signal portion boundaries.

81. The method of claim 25 in which the successive bit cells have the same signal value ranges from a minimum of $d+1$ to a maximum of $k+1$ both within information signal portions and across information signal portion boundaries.

82. The method of claim 31 in which the successive bit cells have the same signal value ranges from a minimum of $d+1$ to a maximum of $k+1$ both within information signal portions and across information signal portion boundaries.

83. The device of claim 34 in which the successive bit cells have the same signal value ranges from a minimum of $d+1$ to a maximum of $k+1$ both within information signal portions and across information signal portion boundaries.

84. The device of claim 43 in which the successive bit cells have the same signal value ranges from a minimum of d+1 to a maximum of k+1 both within information signal portions and across information signal portion boundaries.

85. The signal of claim 46 in which the successive bit cells have the same signal value ranges from a minimum of d+1 to a maximum of k+1 both within information signal portions and across information signal portion boundaries.

86. A method of converting a series of m-bit information words to a modulated signal, with m being an integer, in which method an n-bit code word is delivered for each received information word, with n being an integer exceeding m, and the delivered code words are converted to the modulated signal, and in which the series of information words is converted to a series of code words according to rules of conversion so that the corresponding modulated signal satisfies a predetermined criterion, in which the code words are divided into at least one group of code words of a first type and at least one group of code words of a second type, where the delivery of each of the code words belonging to a group of the first type establishes a first type of coding state determined only by the group to which that code word belongs, and the delivery of each of the code words belonging to a group of the second type establishes a second type of coding state determined not only by the group to which that code word belongs but also by information content in the information word itself for which that code word is delivered, each coding state corresponding to a different set of code words into which information words are converted and when one of the code words is assigned to a received information word, that code word is selected from the set of code words that corresponds to the coding state of the first type or the second type established

when a preceding code word was delivered, where the sets of code words corresponding to coding states of the second type do not contain any code words in common, and in that the signal comprises sync signal portions which have bit cell patterns that do not occur in the sequence of successive information signal portions, while a unique information word is established by the information signal portions of the second group combined with either an adjacent sync signal portion or an adjacent information signal portion.

87. An encoding device, comprising an m-to-n bit converter for converting m-bit information words to n-bit code words, means for converting the n-bit code words to a modulated signal, and state establishing means for establishing a coding state on the delivery of a code word by the converter, the state establishing means being arranged for establishing a first type of coding state for each delivered code word belonging to a group of a first type, which state is determined only by the group to which the delivered code word belongs, and for establishing a second type of coding state for each of the delivered code words belonging to a group of the second type, which state is determined not only by the group to which the delivered code word belongs but also by information content in the information word converted into the delivered code word, in which the m-to-n bit converter comprises means for selecting a code word corresponding to an information word from a set of code words, the set corresponding respectively to the established coding state of the first type or the second type , sets of code words corresponding respectively to coding states of the second type containing no code words in common with other sets of code words corresponding respectively to coding states of the second type, and in that the signal comprises sync signal portions which have bit cell patterns that do not occur in the sequence of successive

information signal portions, while a unique information word is established by the information signal portions of the second group combined with either an adjacent sync signal portion or an adjacent information signal portion.

88. A device for recording information, which device comprises a coding device of claim 87 for converting a series of information words representing the information to a modulated signal, and means for recording on a record carrier an information pattern corresponding to the signal.

89. A coded signal modulated and stored on a record carrier and representing a series of information words for subsequent reading, demodulation and decoding to reproduce the represented series of information words, the coded signal comprising a sequence of q successive information signal portions which represent q information words, where q is an integer, in which signal each of the information signal portions represents one of the information words and comprises n bit cells, each the bit cell having a first or second logical value, each information signal portion belonging to one of a plurality of predetermined groups of information signal portions, each information signal portion belonging to a first one of the groups of information signal portions uniquely establishing an information word irrespective of information signal portions adjacent to the each information signal portion belonging to the first group, and each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the information signal portion adjacent to the each information signal portion belonging to the second group, and in that the signal comprises sync signal portions which have bit cell patterns that do not occur in the sequence of successive information signal portions, while a

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unique information word is established by the information signal portions of the second group combined with either an adjacent sync signal portion 'or an adjacent information signal portion.

90. A decoding device for converting a modulated signal to a series of m-bit information words, the device comprising: demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to information signal portions, and converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted, and in that the signal comprises sync signal portions which have bit cell patterns that do not occur in the sequence of successive information signal portions, while a unique information word is established by the information signal portions of the second group combined with either an adjacent sync signal portion or an adjacent information signal portion.

91. A reading device for reading a record carrier on which information is recorded in an information pattern, the device comprising:

reading means for converting the information pattern to a corresponding modulated signal,

demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being

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assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted, and in that the signal comprises sync signal portions which have bit cell patterns that do not occur in the sequence of successive information signal portions, while a unique information word is established by the information signal portions of the second group combined with either an adjacent sync signal portion or an adjacent information signal portion.

92.   A method of converting a series of m-bit information words to a modulated signal, with m being an integer, in which method an n-bit code word is delivered for each received information word, with n being an integer exceeding m, and the delivered code words are converted to the modulated signal, and in which the series of information words is converted to a series of code words according to rules of conversion so that the corresponding modulated signal satisfies a predetermined criterion, in which the code words are divided into at least one group of code words of a first type and at least one group of code words of a second type, where the delivery of each of the code words belonging to a group of the first type establishes a first type of coding state determined only by the group to which that code word belongs, and the delivery of each of the code words belonging to a group of the second type establishes a second type of coding state determined not only by the group to which that code word belongs but also by information content in the information word itself for which that code word is delivered, each coding state corresponding to a different set of code words into which information words are converted and when one of the code words is assigned to a received information word, that code word is selected from the set of code words that corresponds to the

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coding state of the first type or the second type established
when a preceding code word was delivered, where the sets of code
words corresponding to coding states of the second type do not
contain any code words in common, and in that the information
signal portions from the at least one group of the first type end
in s bit cells having a same logical value, and in that the
information signal portions from the at least one group of the
second type end in t bit cells having a same logical value, in
which s and t can assume different values and in which s and t
are different in value, and in that t is greater than or equal to
2 and smaller than or equal to 5.

93.   An encoding device, comprising an m-to-n bit converter for
converting m-bit information words to n-bit code words, means for
converting the n-bit code words to a modulated signal, and state
establishing means for establishing a coding state on the
delivery of a code word by the converter, the state establishing
means being arranged for establishing a first type of coding
state for each delivered code word belonging to a group of a
first type, which state is determined only by the group to which
the delivered code word belongs, and for establishing a second
type of coding state for each of the delivered code words
belonging to a group of the second type, which state is
determined not only by the group to which the delivered code word
belongs but also by information content in the information word
converted into the delivered code word, in which the m-to-n bit
converter comprises means for selecting a code word corresponding
to an information word from a set of code words belonging to the
coding state of the first type or the second type established,
sets of code words belonging to coding states of the second type
containing no code words in common, and in that the information
signal portions from the at least one group of the first type end
in s bit cells having a same logical value, and in that the

information signal portions from the at least one group of the second type end in t bit cells having a same logical value, in which s and t can assume different values and in which s and t are different in value, and in that t is greater than or equal to 2 and smaller than or equal to 5.

94. A device for recording information, which device comprises a coding device of claim 93 for converting a series of information words representing the information to a modulated signal, and means for recording on a record carrier an information pattern corresponding to the signal.

95. A coded signal modulated and stored on a record carrier and representing a series of information words for subsequent reading, demodulation and decoding to reproduce the represented series of information words, the coded signal comprising a sequence of q successive information signal portions which represent q information words, where q is an integer, in which signal each of the information signal portions represents one of the information words and comprises n bit cells, each the bit cell having a first or second logical value, each information signal portion belonging to one of a plurality of predetermined groups of information signal portions, each information signal portion belonging to a first one of the groups of information signal portions uniquely establishing an information word irrespective of information signal portions adjacent to the each information signal portion belonging to the first group, and each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the information signal portion adjacent to the each information signal portion belonging to the second group, and in that the information signal portions from the at least one group of the first type end in s bit cells

having a same logical value, and in that the information signal portions from the at least one group of the second type end in t bit cells having a same logical value, in which s and t can assume different values and in which s and t are different in value, and in that t is greater than or equal to 2 and smaller than or equal to 5.

96.   A decoding device for converting a modulated signal to a series of m-bit information words, the device comprising:

    demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions, and

    converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted if the information signal portions end in t bit cells having a same logical value, and not if the information signal portions end in s bit cells having a same logical value, in which s and t can assume different values, in which s and t are different in value, and in which t is greater than or equal to 2 and smaller than or equal to 5.

97.   A reading device for reading a record carrier on which information is recorded in an information pattern, the device comprising:

    reading means for converting the information pattern to a corresponding modulated signal,

    demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which

bit string contains a series of n-bit code words which correspond to the information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted, and in that the information signal portions from the at least one group of the first type end in s bit cells having a same logical value, and in that the information signal portions from the at least one group of the second type end in t bit cells having a same logical value, in which s and t can assume different values and in which s and t are different in value, and in that t is greater than or equal to 2 and smaller than or equal to 5.

98. An encoding device, comprising an m-to-n bit converter for converting m-bit information words to n-bit code words, means for converting the n-bit code words to a modulated signal, and state establishing means for establishing a coding state on the delivery of a code word by the converter, the state establishing means being arranged for establishing a first type of coding state for each delivered code word belonging to a group of a first type, which state is determined only by the group to which the delivered code word belongs, and for establishing a second type of coding state for each of the delivered code words belonging to a group of the second type, which state is determined not only by the group to which the delivered code word belongs but also by information content in the information word converted into the delivered code word, in which the m-to-n bit converter comprises means for selecting a code word corresponding to an information word from a set of code words, the set corresponding respectively to the established coding state of the

first type or the second type, sets of code words belonging to coding states of the second type containing no code words in common with other sets of code words belonging to coding states of the second type, in which at least one of the sets of code words for each of at least a number of information words comprise at least a pair of code words, with low-frequency components in the modulated signal being repressed when the information words are converted by selection of code words from the pairs of code words.

99. A device for recording information, which device comprises a coding device of claim 98 for converting a series of information words representing the information to a modulated signal, and means for recording on a record carrier an information pattern corresponding to the signal.

100. A record carrier having a signal recorded in a track, the signal comprising a sequence of successive information signal portions, each signal portion representing an information word in which each of the information signal portions comprises n bit cells having a first or second logical value and in which a plurality of track information patterns represent the signal portions, and in which the information signal portions are spread over at least one group of a first type and at least one group of a second type, while each information signal portion belonging to a group of the first type uniquely represents an information word and each information signal portion belonging to a group of the second type in combination with the logical values of p bit cells at predetermined positions in a following information signal portion represent a unique information word, thereby allowing one information signal portion belonging to the at least one group of the second type to represent a plurality of information words among which the respective information word is distinguishable,

in which at least one of the sets of code words for each of at least a number of information words comprise at least a pair of code words, with low-frequency components in the modulated signal being repressed when the information words are converted by selection of code words from the pairs of code words.

101. A modulated signal representing a series of information words for subsequent reading, demodulation and decoding to reproduce the represented series of information words, the coded signal comprising a sequence of q successive information signal portions which represent q information words, where q is an integer, in which signal each of the information signal portions represents one of the information words and comprises n bit cells, each the bit cell having a first or second logical value, each information signal portion belonging to one of a plurality of predetermined groups of information signal portions, each information signal portion belonging to a first one of the groups of information signal portions uniquely establishing an information word irrespective of information signal portions adjacent to the each information signal portion belonging to the first group, and each information signal portion belonging to a second one of the groups of information signal portions uniquely establishing an information word depending upon the logical values of p bit cells at predetermined positions in the information signal portion adjacent to the each information signal portion belonging to the second group, in which at least one of the sets of code words for each of at least a number of information words comprise at least a pair of code words, with low-frequency components in the modulated signal being repressed when the information words are converted by selection of code words from the pairs of code words.

102. A decoding device for converting a modulated signal to a series of m-bit information words, the device comprising:

demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted if the information signal portions end in t bit cells having a same logical value, and not if the information signal portions end in s bit cells having a same logical value, in which s and t can assume different values and in which s and t are different in value, and in that t is greater than or equal to 2 and smaller than or equal to 5, in which at least one of the sets of code words for each of at least a number of information words comprise at least a pair of code words, with low-frequency components in the modulated signal being repressed when the information words are converted by selection of code words from the pairs of code words.

103. A reading device for reading a record carrier on which information is recorded in an information pattern, the device comprising:

reading means for converting the information pattern to a corresponding modulated signal,

demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being assigned to each of 'the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted if the information signal portions end in t bit cells having a same logical value, and not if the information signal portions end in s bit cells having a same logical value, in which s and t can assume different values and in which s and t are different in value, and in that t is greater than or equal to 2 and smaller than or equal to 5, in which at least one of the sets of code words for each of at least a number of information words comprise at least a pair of code words, with low-frequency components in the modulated signal being repressed when the information words are converted by selection of code words from the pairs of code words.

104. A record carrier having a signal recorded in a track, the signal comprising a sequence of successive information signal portions, each signal portion representing an information word in which each of the information signal portions comprises n bit cells having a first or second logical value and in which a plurality of track information patterns represent the signal portions, and in which the information signal portions are spread over at least one group of a first type and at least one group of a second type, while each information signal portion belonging to a group of the first type uniquely represents an information word and each information signal portion belonging to a group of the second type in combination with the logical values of p bit cells at predetermined positions in a following information signal portion represent a unique information word, thereby allowing one information signal portion belonging to the at least one group of the second type to represent a plurality of information words

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among which the respective information word is distinguishable, in which the code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words, where p is an integer smaller than n, and in which low frequency components of the modulated signal are repressed.

105. A decoding device for converting a modulated signal to a series of m-bit information words, the device comprising:

demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted, in which the code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words, where p is an integer smaller than n, and in which low frequency components of the modulated signal are repressed.

106. A reading device for reading a record carrier on which information is recorded in an information pattern, the device comprising:

means for converting the information pattern to a corresponding modulated signal,

demodulation means for converting the modulated signal to a bit string of bits having a first or second logical value, which bit string contains a series of n-bit code words which correspond to the information signal portions, and

converting means for converting the series of code words to the series of information words, an information word being assigned to each of the code words to be converted and depending thereon, in which the converting means convert a code word to an information word also depending on another code word adjacent to the code word being converted, in which the code words contained in different sets associated with the coding states of the second type are mutually distinguishable on the basis of the logical values of bits at p predetermined non-consecutive bit positions in the code words, where p is an integer smaller than n, and in which the low frequency components of the modulated signal are repressed.

107. The carrier of claim 2, in which the positions of the p bit cells are spaced at least d apart.

108. The carrier of claim 18, in which the positions of the p bit cells are spaced at least d apart both within information signal portions and across information signal portion boundaries.

109. The method of claim 25, in which the information in the information word that determines the coding state is the logical value of p bits of the information word and the positions of the p bits are spaced at least d apart both within information signal portions and across information signal portion boundaries

110. The device of claim 37, in which the p bit positions are spaced at least d apart both within information signal portions and across information signal portion boundaries.

111. The carrier of claim 46, in which the positions of the p bit cells are spaced at 'least d apart both within information signal portions and across information signal portion boundaries.

112. The device of claim 55, in which the positions of the p bit cells are spaced at least d apart both within information signal portions and across information signal portion boundaries.